

Claim Rejections Under 35 U.S.C. §102(e)

Claims 1-3, 5-8, 10-19, 21, 22, 24-30, 32-34, 36-39, 40-49 and 51-56 stand rejected under 35 U.S.C. §102(e) as being unpatentable over Beith et al., U.S. Patent No. 6,449,496 ("Beith"). The rejection is respectfully traversed in view of the amendments to the claims and for the reasons set forth herein.

Beith describes a method of providing a voice recognition user interface for a telephone in which user acknowledgement of a system announced action is optional or ignored. Thus, referring to Figure 7A cited by the Examiner, after a Voice Recognizer (VR) identifies the name of a party to be called, the name and selected processing to be performed (i.e., "Calling") are announced at step 320. If the VR understands the user to say "no" at step 326, then the function is canceled, while if a spoken input is invalid (e.g., the user speaks too soon or the speech is unrecognized), error processing is performed at step 352. However, if the user replies "yes" or is silent for 1.5 seconds, then the selected processing is initiated at step 325 wherein call origination is performed. Thus, while Beith interprets a silent period as the equivalent of user acceptance of a selected function and provides means for interrupting performance of the selected function, the disclosure does not provide for selection of an alternative function during the silent period. For example, as depicted in Figure 7A, all paths result in either initiation of the selection function (i.e., call origination at steps 324 and 356) or cancellation of the selected function (steps 362 and 372); the user is never provided with an opportunity to initiate an alternative processing in connection with the identified name (e.g., obtaining a listing for the named party).

In contrast to Beith, Applicant's invention provides a silent period during which a user may initiate alternative processing, not just accept (either verbally or by silence) or reject default or selected processing. For example, claim 1 as amended recites:

1. *A method of providing voice responses to commands comprising the steps of:
receiving a spoken identifier;
attempting recognition of said spoken identifier to identify a subscriber;*

*selecting a first processing option in connection with said subscriber;
providing a voice message indicative of said first processing option;
providing a silent delay period of a predetermined duration immediately
subsequent to a completion of said step of providing a voice message, and
selectively (i) initiating alternate processing in connection with said subscriber in
response to a receipt of, and consistent with, a second command input during said
silent delay period, and (ii) initiating said first processing option in connection
with said subscriber in response to an absence of said second command input for
a duration of said silent delay period.*

Beith neither describes nor suggests such a method including, *inter alia*, "providing a silent delay period of a predetermined duration immediately subsequent to a completion of [a] step of providing a voice message, and selectively (i) initiating alternate processing in connection with said subscriber in response to a receipt of, and consistent with, a second command input during said silent delay period, and (ii) initiating said first processing option in connection with said subscriber in response to an absence of said second command input for a duration of said silent delay period. Accordingly, the applied reference fails to anticipate or render obvious the subject matter of claim 1.

Similarly, the subject matter of independent claims 6, 29, 32, 36, 52 and 55 is neither taught nor suggested by Beith including, *inter alia*;

*selectively (i) initiating alternate processing related to the selected one of
the subscribers in response to a receipt of a command input identifying said
alternate processing during [a] silent delay period, and (ii) dialing the telephone
number corresponding to [a] selected one of ...subscribers immediately after said
delay period and in response to an absence of said command input for a duration
of said silent delay period.*

(Claim 6)

or

selectively (i) initiating alternate processing related to [a] selected one of ...subscribers in response to ...second speech content data including an alternate processing command, and, otherwise, (ii) dialing the telephone number corresponding to the selected one of said subscribers immediately after [a] delay period.

(claim 29)

or

means for selectively (i) initiating alternate processing in connection with [an] identifier in response to a receipt of a command input during [a] silent delay period, and (ii) initiating [a] first processing option in connection with said identifier in response to an absence of said command input for a duration of said silent delay period.

(claim 32)

or

control means for selectively (i) initiating alternate processing in connection with [a] selected one of ...subscribers in response to a receipt of a command input during [a] silent delay period, and (ii) dialing the telephone number corresponding to the selected one of said subscribers immediately after said delay period and in response to an absence of said command input for a duration of said silent delay period.

(claim 36)

or

[a] processor [operating such that it] selectively (i) initiates alternate processing in connection with [a] selected one of ...subscribers in response to a

receipt of a command input during [a] silent delay period, and (ii) initiates a dialing of [a] telephone number corresponding to the selected one of said subscribers immediately after [a] delay period and in response to an absence of said command input for a duration of said silent delay period.

(claim 52)

or

a processor responsive to said speech content data and to a set of instructions for ... initiating alternate processing in connection with the selected one of said subscribers in response to second speech content data including an alternate processing command, and, otherwise, ...dialing the telephone number corresponding to the selected one of said subscribers immediately after said delay period.

(claim 55).

Thus, for the reasons presented, independent claims 1, 6, 29, 32, 36, 52 and 55, as amended, are each considered to be patentably distinguishable over Beith. Accordingly, withdrawal of the outstanding rejection of those claims is respectfully requested.

Dependent claims 2, 3, 5, 7, 8, 10-19, 21, 22, 24-28, 30, 33, 34, 37-39, 40-49, 51, 53, 54 and 56 each describe additional subject matter not described or suggested in the applied art in the claimed combinations and are considered to be allowable independently of their respective base and any intervening claims.

Claim Rejections Under 35 U.S.C. §103(a)

Claims 4, 9, 20, 23, 31, 35, 39, 50 and 57 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Beith. The rejection is respectfully traversed in view of the amendments to the claims and for the reasons set forth herein.

As an initial matter, the rejected claims are considered to be allowable as dependent from the allowable subject matter of their respective base claims. Further, each of the rejected dependent claims are considered to be allowable as reciting additional subject matter not disclosed or suggested by the applied reference in the claimed combination. For example, claims 4, 9, 20, 31, 35, 39, 50 and 57 require that the duration of the silent delay period be 1.8 seconds, this period being considered optimal. As explained in the specification:

The selection of an appropriate silent delay period has been found to be critical to user acceptance of the system. Delay periods of less than 1.2 to 1.5 second have been found to be inadequate to signal a user that the system is available to receive an input and provide sufficient reaction time for the user to initiate the request, i.e., speak the alternate command word or words. On the other hand, silences of greater than 2.0 to 2.3 seconds are perceived as processing delays and are unacceptable, particularly to users who are not requesting alternate processing. Accordingly, a silent delay period should be in the range of 1.2 to 2.3 seconds and preferably in the range of 1.5 to 2.0 seconds, the optimal delay being 1.8 seconds. Use of a silent delay in these time ranges results in no perceptible or at least an acceptable delay while providing sufficient opportunity for those users requiring alternative processing to initiate the appropriate actions.

Specification at page 8, lines 18 – 28.

Contrary to the Examiner's position, use of 1.8 is not a mere matter of choice, but is a carefully selected delay period. While an exact time period may well not be critical for the operation of the Beith system, it is a sufficiently significant aspect of a preferred embodiment of Applicant's invention that the period is the subject matter of eight dependent claims.

For the reasons presented, claims 4, 9, 20, 23, 31, 35, 39, 50 and 57 are considered to be allowable over the applied art and withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.


CONCLUSION

In view of the above, each of the presently pending claims 1-62 in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

The fee in the amount of \$156.00 is enclosed for additional claims. The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 06-2375, under Order No. 414.028/09904552. A duplicate copy of this paper is enclosed.

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Respectfully submitted,

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MARKED UP VERSION TO SHOW CHANGES

1. A method of providing voice responses to commands comprising the steps of:
[receiving a first command;
selecting a first processing option in response to said first command;
providing a voice message indicative of said first processing option selected;]
receiving a spoken identifier;
attempting recognition of said spoken identifier to identify a subscriber;
selecting a first processing option in connection with said subscriber;
providing a voice message indicative of said first processing option;
providing a silent delay period of a predetermined duration immediately
subsequent to a completion of said step of providing a voice message; and selectively (i)
initiating alternate processing in connection with said subscriber in response to a receipt
of and consistent with, a second command input during said silent delay period, and (ii)
initiating said first processing option in connection with said subscriber in response to an
absence of said second command input for a duration of said silent delay period.
5. The method according to claim 1 wherein said first and second [command]
commands comprises a speech input
6. A method of telephone dialing using a voice activated dialer including a directory
of subscriber names and telephone numbers, the method comprising the steps of:
selecting one of said subscribers most closely corresponding to a first speech
input;
providing a speech output corresponding to the selected one of said subscribers;
providing a silent delay period of a predetermined duration immediately
subsequent to a completion of said step of providing a speech output; and
selectively (i) initiating alternate processing related to the selected one of the
subscribers in response to a receipt of a command input identifying said alternate
processing during said silent delay period, and (ii) dialing the telephone number
corresponding to the selected one of said subscribers immediately after said delay period

and in response to an absence of said command input for a duration of said silent delay period.

29. A method of telephone dialing using a voice activated dialer including a directory of subscriber names and telephone numbers, the method comprising the steps of:

- receiving a first speech input;
- recognizing said first speech input to provide first speech content data;
- selecting one of said subscribers most closely corresponding to said first speech content data;
- providing a speech output corresponding to the selected one of said subscribers;
- providing a silent delay period of a predetermined duration within a range of 1.2 to 2.3 seconds immediately subsequent to a completion of said step of providing a speech output;

- listening for a second speech input during said silent period;
- recognizing said second speech input to provide second speech content data; and
- selectively (i) initiating alternate processing related to the selected one of said subscribers in response to said second speech content data including an alternate processing command, and, otherwise, (ii) dialing the telephone number corresponding to the selected one of said subscribers immediately after said delay period.

32. A voice response unit comprising:

- means for receiving [a first command] an identifier;
- means for selecting a first processing option in response to said first [command] identifier;
- means for providing a voice message indicative of said first processing option selected;
- means for providing a silent delay period of a predetermined duration immediately subsequent to a completion of providing said voice message; and
- means for selectively (i) initiating alternate processing in connection with said identifier in response to a receipt of a [second] command input during said silent delay period, and (ii) initiating said first processing option in connection with said identifier in

response to an absence of said [second] command input for a duration of said silent delay period.

52. A voice activated dialer comprising:
a memory storing a directory of subscriber names and telephone numbers;
a speech recognition engine receiving a speech input and providing content data derived from said speech input signal;
a processor responsive to said content data for selecting one of said subscribers;
an audio output providing a speech signal corresponding to the selected one of said subscribers; and
a timer providing a silent delay period of a predetermined duration immediately subsequent to a completion of providing said speech signal,
wherein said processor selectively (i) initiates alternate processing in connection with the selected one of said subscribers in response to a receipt of a command input during said silent delay period, and (ii) initiates a dialing of the telephone number corresponding to the selected one of said subscribers immediately after said delay period and in response to an absence of said command input for a duration of said silent delay period.

55. A voice activated dialer comprising:
a memory storing a directory of subscriber names and telephone numbers;
a speech recognition engine responsive to a speech input for providing speech content data; and
a processor responsive to said speech content data and to a set of instructions for
(i) selecting one of said subscribers most closely corresponding to first speech content data;
(ii) providing a speech output corresponding to the selected one of said subscribers;
(iii) providing a silent delay period of a predetermined duration within a range of 1.2 to 2.3 seconds immediately after providing said speech output;

(iv) initiating alternate processing in connection with the selected one of said subscribers response to second speech content data including an alternate processing command, and, otherwise, (ii) dialing the telephone number corresponding to the selected one of said subscribers immediately after said delay period.

Please add the following new claims 58-60:

--58. A method comprising the steps of:

performing speech recognition of a first speech input to select a designated subscriber;

playing a voice message indicative of a first processing option in connection with said designated subscriber;

providing a silent delay period of up to a predetermined duration immediately subsequent to a completion of said playing step; and

selectively (i) identifying a second processing option specified by a second speech input and, in response, automatically initiating said second processing option in connection with said designated subscriber (ii) automatically initiating said first processing option in connection with said subscriber in response to an absence of said second speech input for a said predetermined duration of said silent period.

59. The method according to claim 58 further wherein said step of comprising a step of selectively (iii) identifying an exception command specified by said second speech input and, in response, performing error processing.

60. The method according to claim 59 wherein said error processing includes the steps of:

prompting for a third speech input;

performing speech recognition of said third speech input to reselect a designated subscriber;

playing a voice message indicative of said first processing option in connection with said reselected designated subscriber;

providing a silent delay period of up to a predetermined duration immediately subsequent to a completion of said playing step; and
selectively (i) identifying a second processing option specified by a second speech input and, in response, automatically initiating said second processing option in connection with said designated subscriber (ii) automatically initiating said first processing option in connection with said subscriber in response to an absence of said second speech input for a said predetermined duration of said silent period.--